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ABSTRACT

Described is the Special Educator Training System which uses the Diagnostic Teaching Model and is applicable to all levels and types of teaching including preservice, in-service, elementary, intermediate, secondary, handicapped children, and normal children. The "Teacher Competency Journal", a 100 page document based on 323 performance objectives which asks the teacher to provide information supporting decisions he has made in the educational process, is introduced. Defined are thirteen task areas, such as diagnosis and identification of the relevant attributes of the child and his environment and specification of objectives, which the student teacher must master. Several sample pages from the Teacher Competency Journal are provided. (IM)

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TEACHER COMPETENCY JOURNAL:
ASSESSMENT AND SELECTION OF INSTRUCTIONAL STRATEGIES

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The following pages have been selected from the Teacher Competency Journal in order to acquaint you with materials and procedures prescribed in the journal. The materials presented here are intended to be accompanied by a presentation that will describe the materials and procedures in greater detail. These selected pages do not represent the complete Teacher Competency Journal -- they are merely a brief introduction.

We are glad that you are interested in obtaining information about this training program. This booklet contains:

- a rationale and description of the Teacher Competency Journal,
- overview of the task areas,
- Task Area I evaluation forms, and
- selected excerpts from the journal.

Please feel free to write in this booklet as the presentation progresses and do not hesitate to ask questions. Thank you for allowing us to share the Teacher Competency Journal with you.

PJM and RCE

Special education, indeed, all of education, is very prone to accept only the new, the glittering, the never-before-tried idea. Consider Baumeister's (1969) diatribe against behavior modification:

Operant conditioners have rediscovered a very fundamental principle: the empirical law of effect . . . Over a century ago Seguin, in his extensive writing on the physiological method, described procedures that are remarkably similar to those currently advocated in the name of "behavior modification" (p. 50).

One wonders how it came to be that we ridicule valuable ideas and techniques simply because they are no longer new. It would seem that methods that have consistently worked for us over the years would be the "old friends", the very concepts that we would cling to most dearly. And yet we bounce from new idea to new idea, hoping for a panacea.

During the past ten years, we special educators have become defensive concerning the efficacy of our field. It has been said that we don't prepare handicapped youngsters to function successfully in the real world. When such a serious charge is made, we have at least two alternatives. First, we can look for new ways to promulgate successful functioning in the children we teach. Second, we can make sure that what we are doing is consistent with what we know about how children learn. Primarily, we have chosen the first alternative. That seems unfortunate, because actually, we know a lot about human learning. Judging from the results of recent attempts to discover aptitude by treatment interactions among various sorts of children labeled "handicapped" references, we can be fairly confident that the conditions that apply to normal children's learning also apply to "learning disabled", "disturbed", and "mentally retarded"

children. It is in this sense that the training system to be presented here is "superannuated", unvarnished, and moderate. We feel strongly that the basics must be mastered by the teacher before novel, unsupported methods are studied as potential classroom techniques.

Of course, new ideas must be generated if we want to expand our ability to meet the desperate challenge exceptional children present to us. However, we have to be willing to wait until empirical studies have shown these new techniques to be at least as effective as what we already know works. If we implement them on a widespread basis before this process takes place, we are, in fact, experimenting with large numbers of children without the knowledge and consent of their parents.

Purpose, Rationale, and Background for the Special Educator Training System

This paper is intended to present a system for training special educators that is well-founded in the literature of special education, educational psychology, child development, psychology, and other related disciplines. It has been used successfully at the Pennsylvania State University for four years and is currently being implemented at Virginia Commonwealth University by two of the junior authors.

The instructional model we have adopted, i.e., the Diagnostic Teaching Model (DTM), is presented in flowchart form in Figure 1. It was chosen because it embodies the frequently advocated features of individualism and behaviorism in teaching children (Martin, 1972). It was developed to be applicable to all types and levels of teaching: preservice, in-service, elementary, intermediate, secondary, handicapped children, and normal

children. The model also provides a framework which accomodates the application of what we know to be the most advantageous approaches in education.

The Special Educator Training System (SETS), a performance-based method for training teachers to apply the DTM, has been developed according to the practices advocated by individuals and associations that have had the most experience in building performance-based education systems (e.g., Houston, 1972; American Association of Colleges for Teacher Education, Multi-State Consortium on Performance-Based Teacher Education). The development has not been completed (these projects never are, nor should they be), but there exists enough unique aspects in the training system to deserve dissemination now.

Insert Figure 1 About Here

In order to provide the reader with an historical perspective of SETS, a synopsis of its development is presented below.

1. Adoption of the Diagnostic Teaching Model by the faculty of the Program for the Education of Exceptional Children (EEC) in 1971.
2. Development of computer assisted instruction course (CARE 2/3) to train personnel in the use of the Diagnostic Teaching Model with pre-school and primary aged children (Ward, Cartwright, Cartwright, & Campbell, 1973).
3. Dissemination of the broad concepts and steps implicit in the training-based model (Cartwright & Cartwright, 1972; Cartwright, Cartwright, & Ysseldyke, 1973).
4. Construction and implementation of the Teacher Competency Journal (prototype), a criterion-referenced instrument based on the Diagnostic Teaching Model & used to evaluate teacher performances in graduate practicum (Eaves, 1973).
5. Review of literature relevant to the Diagnostic Teaching Model and translation of the literature into performance-based objectives for teachers in training (SETS Project completed by faculty and student members of the EEC Program, 1974).

6. Validation of the performance objectives compiled by committees (number five above) via the Teacher Competency Rating Scale completed by EEC faculty members (Eaves & Smith, 1974).
7. Validation of the performance objectives (number five above) via the Teacher Competency Rating Scale completed by randomly selected teachers of the "educably mentally retarded", "trainably mentally retarded", "emotionally disturbed", and "learning disabled" throughout the state of Pennsylvania (Smith, 1974).
8. Refinement and reimplementation of the Teacher Competency Journal, now keyed to the performance-based objectives of the Special Educator Training System (Eaves, 1974).
9. Collection of reliability and normative data from undergraduate and graduate level practicum students (1974-present).
10. Evaluation of graduates of the EEC master's program via the Trained Personnel Survey Form (graduates' self evaluation) and the Supervisor of Trained Personnel Evaluation Form (evaluation by each graduate's in-service supervisor). This evaluation was completed by the Center for Research Within the Schools, an independent agency (Barnette, 1974).

Space limitations do not permit expansion of the developmental activities mentioned above, nor more recent projects designed to improve the program. The senior author will respond to individual requests for information, however. Briefly, evaluations of SETS completed so far are overwhelmingly positive.

Domains and Taxonomies

During the initial prototype evaluation (1973-74), we assumed that student teachers had a sound working knowledge of the domains that they were likely to be called upon to assess and teach. However, as a group they tended not to be able to formulate coherent taxonomies of objectives in such commonplace domains as mathematics, reading, spelling, etc. As a result, the teacher often ended up with a conglomeration of assessment

data which was incomparable from instrument to instrument and without any recognizable sequence. Frequently, specified instructional objectives did not reflect the available assessment data. Consequently, we added a new initial step in the model: The selection of taxonomies of objectives for each domain relevant to the individual child's learning and performance. Therefore, for children screened as demonstrating weaknesses in mathematics, the teacher is required to specify a comprehensive taxonomy of objectives for mathematics and then to assess the child according to the objectives in the taxonomy. A short portion of one such taxonomy (Eaves, 1974) is illustrated below.

ADDITION:

3.1.0. Basic Addition Facts

- 3.1.1. Given all possible permutations of the addition facts (0-5) presented vertically and in random order, the child will write the answers correctly at a rate of at least 25 per minute.
- 3.1.2. Given all possible permutations of the addition facts (6-9) presented vertically and in random order, the child will write the answers correctly at a rate of at least 20 per minute.
- 3.1.3. Given all possible permutations of the addition facts (0-9) presented vertically and in random order, the child will write the answers correctly at a rate of at least 20 per minute.

Given taxonomies such as this in the relevant domains, student teachers are better able to assess, identify strengths and weaknesses in objective form, develop and use instructional strategies and materials, and evaluate outcomes. Without them, students often end up teaching highly objective skills, but skills which are too frequently trivial or unnecessary for the child in question. The taxonomies provide the teacher with a guide that directs his assessment and this is a primary advantage of requiring the step in the system. With taxonomies, students easily move from the domain

level (e.g., "Which domains can be considered as strengths and which can be considered as weaknesses for this child?") to the broad skill level ("If math is a serious weakness, does the weakness lie in the broad skill of sets, using numbers and numerals, addition, subtraction, . . . , etc.?") to the enabling skill level ("If addition is the first broad skill in which the child is weak, does the weakness lie in addition facts, the formal operations of addition, or addition problem solving?")

Identification of Relevant Attributes (Assessment)

The identification of the relevant attributes of the child and his environment, better known as assessment, is comprised of three important concepts:

1. Taxonomic Level
2. Assessment Phase
3. Assessment Methods Used

Figure 2 illustrates the relationships among the three concepts. In the Screening phase of assessment, the teacher uses informal consultation, structured interviews, inspection of previously collected data, and screening devices (questionnaires, rating scales, etc.) to determine which of the relevant attributes of the child and his environment warrant special assistance. The term, attributes, refers to the large domains that teachers often find themselves concerned with in educating children. Examples include skills in reading, mathematics, spelling, writing, classroom conduct, and so on. In Screening, the purpose is not particularly to nail down highly specific enabling skills that need improvement. At this

stage of assessment, the methods and instruments are not usually valid or reliable enough to make fine decisions at the enabling skill level.. Rather, the teacher simply wants to learn which of the entire range of attributes will require the most concerted effort on her part.

Insert Figure 2 About Here

During the second phase of assessment, Clinic Assessment, the teacher uses broad-band standardized tests, nonstandardized tests, observation, and referral to confirm or deny the importance of the needs specified during Screening. Tentative hypotheses are also proposed regarding the broad skills which underly each attribute area or domain. A second purpose in Clinic Assessment is the telescopic narrowing down of instructional entry points. Each phase of assessment brings us closer to specifying those short term objectives that the teacher will attempt to impart to the child.

During the third phase of assessment, Follow-up Assessment, the teacher employs narrow-band nonstandardized tests and observation systems to identify the specific strengths and weaknesses of the child and his environment at the enabling skill level. An observation schedule used to measure instances of compliance to teacher requests would be an example of an instrument used in Follow-up Assessment. A nonstandardized test constructed to measure the child's knowledge and use of contractions is another example.

The real point in going through all of these phases during assessment is that we can never hope to individually assess every major and minor objective that we have for children. The time, expense, and effort involved in using narrow band instruments makes it impossible except in theory. The

latter discussion gives a flavor of the flow of events in the first task area. Below are the objectives teachers are expected to perform during the identification of relevant attributes (assessment):

- | | |
|---|---|
| SELECT
ASSESSMENT
METHODS &
INSTRUMENTS | 1. Given several questions about an actual child and his environment, <u>select</u> the assessment methods and instruments that can best answer the questions. |
| CONSTRUCT
ASSESSMENT
METHODS &
INSTRUMENTS | 2. Given several questions about an actual child and his environment, <u>construct</u> assessment instruments that can best answer the questions. |
| COLLECT
ASSESSMENT
DATA | 3. Given the methods and instruments for assessment, collect the assessment data according to the instructions suggested by the producers of the instruments and incorporate appropriate means to record the raw data. |
| SUMMARIZE
ASSESSMENT
DATA | 4. Given raw assessment data, summarize the data in a relevant and meaningful way in order to help answer assessment questions. |
| INTERPRET
SUMMARIES OF
ASSESSMENT
DATA | 5. Given relevant and meaningful summaries of assessment data, interpret the summaries and discuss their implications with regard to the assessment questions. |
| ASSESS
NEEDS &
STATE ENTRY
PROFICIENCY
LEVELS | 6. Given summaries and interpretations of assessment data derived from a variety of assessment methods and resources and covering a variety of attributes, determine the attributes most in need of improvement and state estimates of the child's entry proficiency levels for each broad skill <u>and</u> the enabling skills which undergird each broad skill. |

Selection of Instructional Objectives and Evaluative Components

The need for the teacher to have a taxonomy of goals and objectives from the start will become clear at this stage in the Diagnostic Teaching Model. It is here that the teacher translates the broad skills named as

needs during assessment into relatively long term objectives for the child. For instance, if addition, a broad skill of mathematics, was found to be a weakness during assessment, in this phase it is the teacher's job to specify in clear, unambiguous form an instructional objective, which will provide for the gathering of data which indicates whether or not the instructional objective has been attained.

Second, she must specify the instrument she will use to evaluate whether or not the child has attained the instructional objective. Inasmuch as the broad skill was previously measured during assessment, it makes sense that the same instrument should be used to evaluate instructional outcomes. Therefore, it is important for the teacher to know what objectives comprise the attribute area before beginning to apply this model.

There are three broad instructional objectives that teachers are expected to perform to criterion levels in the Selection of Instructional Objectives and Evaluative Components. They are:

SPECIFY
TERMINAL
BEHAVIOR &
CONDITIONS

1. Given a hierarchy of attributes in need of improvement and their related broad skills, specify observable terminal behavior and the conditions under which the behavior will occur for each broad skill.

SPECIFY
CRITERIA FOR
MINIMALLY
ACCEPTABLE
PERFORMANCE

2. Given several kinds of terminal behavior and varying conditions under which the behavior will occur, specify the criteria for minimally acceptable performance.

SPECIFY
EVALUATIVE
COMPONENTS

3. Given several broad skills in need of improvement, specify evaluative components and classify them according to:
 - a. type of evaluation (formative-summative)
 - b. type of mastery (absolute-relative)
 - c. type of data (percentage, rate, duration, etc.)
 - d. method of evaluation (nonstandardized tests, observation, etc.)

Task Analysis and Selection of Evaluative Components

Once again, the need for a "built-in" taxonomy of goals and objectives at the outset is apparent. It is during this stage of SETS that the teacher task analyzes or "breaks down" the terminal behavior of each instructional objective specified in task area II and identifies the enabling skills that are requisites for the performance of the instructional objective. For example, if hand-eye coordination can be considered one of the broad skills of the gross motor domain, then it is possible to task analyze hand-eye coordination into such enabling skills as "catching" and "throwing" (Reid, 1976). Likewise, if phonetic analysis can be considered a broad skill in reading, then examples of enabling skills underlying the broad skill might include letter recognition, initial consonants, medial consonants, consonant blends, vowels, and so on.

After the enabling skills are identified, the teacher must specify in clear unambiguous form, short term objectives which will allow satisfactory evidence to be gathered that will indicate whether or not the child has mastered the enabling skill. As they are used here, short term objectives, or any objectives for that matter, are precisely stated definitions of the more ambiguous terms used to identify enabling skills. It's as if the teacher is saying, "Now when I talk about mastery of initial consonants, here's what I mean. When orally presented with a representative sample of 60 words beginning with each of the consonants in the alphabet, the child will supply the correct initial consonant sound with 100% accuracy on three consecutive days."

Once the teacher has written the short term objective for an enabling skill, she can specify characteristics of the instrument she will use to evaluate mastery of the objective by the child. Since the child's proficiency level was previously estimated during assessment, the same instrument probably should be used to evaluate instructional outcomes. And again, it is crucial that the teacher know which enabling skills and short term objectives comprise the broad skill before beginning assessment procedures.

There are three broad instructional objectives that teachers are expected to perform to criterion levels in Task Analysis and Selection of Evaluative Components. They are:

- | | |
|--|--|
| LIST ENABLING SKILLS AND SPECIFY SHORT TERM OBJECTIVES | 1. Given several instructional objectives for broad skills, analyze the terminal behavior, list the enabling skills comprising the terminal behavior, and specify a short term objective for each enabling skill in need of improvement. |
| SPECIFY CRITERIA FOR MINIMALLY ACCEPTABLE PERFORMANCE | 2. Given several enabling skills in need of improvement and their concomitant short term objectives, specify criteria for minimally acceptable performance. |
| SPECIFY EVALUATIVE COMPONENTS | 3. Given several enabling skills in need of improvement, specify evaluative components and classify them according to: <ul style="list-style-type: none"> a. type of evaluation (formative-summative) b. type of mastery (absolute-relative) c. type of data (percentage, rate, duration, etc.) d. method of evaluation (non-standardized test, observation, etc.) |

Selection and Use of Instructional Strategies and Materials

Contrary to the opinions of some, we believe there are a large number of teaching principles that teachers can and should use when they develop instructional strategies. Individuals such as Blake (1976),

Bugelski (1971), and DeCecco (1968) have contributed much to the specification of these principles by applying research on the psychology of learning and motivation to teaching practice. Unlike many of the current "theories" presented in special education texts, these principles or conditions of learning are not at all mystical, nor are they new. For example, the literature on distribution of practice extends back to the 1930's. The characteristic effects of different schedules of reinforcement were experimentally studied as far back as the 1920's. Itard employed operant principles 175 years ago. Not only are they not mystical, many of these conditions of learning are rather well-known to teachers. For instance, most of us are aware that learners need immediate feedback or knowledge of results in order to make adjustments in their future performance. Nevertheless, we find teachers who wait for days to let the child know that he behaved incorrectly... or badly... or even very well. Frequently, new teachers fail to let the child know how he behaved incorrectly and how he might change in order to behave correctly. We find teachers who refuse to use drill techniques even when the objective specifies speed and rote memory as the terminal goal (e.g., multiplication facts). Contrarily, other teachers use drill regardless of the type of learning involved.

So far, we have identified about 40-50 general conditions of learning (i.e., conditions that apply regardless of the specific type of learning involved) and about 25-30 conditions that apply to specific types of learning (e.g., verbal learning, concept learning, problem solving, etc.). We believe that if we can impart these 80 or so teaching principles to our trainees to the extent that they consistently apply them, that these

skills will carry them far beyond most of the pseudo-empirical teaching approaches that are foisted on teachers in the field every day. In short, we tend to be skeptical of commercial publishers who promote "The Latest Thing in Educational Technology" — "Mother Hubbard's Cure-all's", enticingly packaged materials composed of colorful boxes (Lerner, 1971), or quick and dirty assessment instruments designed to save the teacher time and the administration money. We are conservative in the sense that we prefer to employ teaching strategies that have repeatedly shown themselves to promote in children more effective approaches in living.

There are three broad instructional objectives that teachers are expected to perform to criterion levels in Selection and Use of Instructional Strategies and Materials. They are:

- | | |
|--|---|
| DEVELOP AN
APPROPRIATE
INSTRUCTIONAL
STRATEGY | 1. Given a task analysis of a broad skill and short term objectives for each enabling skill identified in the task analysis, develop an appropriate instructional strategy to match the components of the short term objective(s) and the characteristics of the child. |
| ADOPT, ADAPT,
OR DESIGN
INSTRUCTIONAL
MATERIALS | 2. Given an instructional strategy that matches the components of the short term objective(s) and the characteristics of the child, adopt, adapt, or design materials that are commensurate with the strategy that has been developed. |
| IMPLEMENT THE
STRATEGY | 3. Given an appropriate instructional strategy and materials that are commensurate with the strategy, implement the instructional strategy as it was developed. |

Implementation of Evaluation

Since the specific instruments to be used in evaluating instructional outcomes were selected during the objective specification phase, the teacher has only to collect, summarize, and interpret evaluation data in

this final phase of SETS. In this way the teacher can determine the goodness of the strategies and materials used.

Although rather specific, narrow band instruments which allow data to be collected directly from the child's behavior are recommended for evaluation purposes, all of the methods mentioned in the Identification of Relevant Attributes (Assessment) are conceivably appropriate here. Since the instruments and performance objectives for trainees are approximately the same as those employed during assessment, teachers who have successfully completed the former phase usually have little trouble implementing evaluation. Likewise, if objectives have been clearly developed, the teacher should have little difficulty determining the efficacy of the instructional strategy.

When the objective has been attained by the child, the teacher simply re-routes to the list of short term objectives yet to be achieved and selects and implements a strategy designed to facilitate the child's mastery of the next set of sequential objectives. As evaluation data indicate mastery of the new objectives, the cycle is again repeated.

Behavior Management

Although a rather elaborate system is employed to evaluate how well teachers in the EEC Program interact with children, space limitations prevent its discussion here. However, Herr, Eaves, McLaughlin, & Horn (In Press) have described the system rather thoroughly for those interested in pursuing this important component of SETS.

Conclusion

The extent to which objectives are attained by the teacher is determined by ongoing observations as well as careful inspection of his/her Teacher Competency Journal. The Journal is a 100 page document which asks the teacher to provide information that supports the decisions (s)he has made in the educational process. For example, if the teacher decides to construct an observation schedule during assessment, the following criteria must be provided in the Journal: (a) statement of the purpose of the observation schedule; (b) instructions for using the instrument and the training of observers; (c) definitions of the behavior to be observed; (d) a record sheet; (e) "normative" data collected during the development of the instrument; (f) reliability data. If these requirements are met and reflect competent performance, the teacher receives reinforcing feedback and an excellent evaluation on that particular objective. If not, constructive criticism is given and the teacher may correct errors before formal evaluation takes place. In all, teachers might provide evidence of their knowledge and performance on 323 objectives during a single practicum experience.

Overview of the Task Areas

Thirteen task areas define the functions which a student must master for his/her role as a teacher. The first six task areas comprise the Diagnostic Teaching Model and the final seven are considered important additional functions. Names and descriptions of these task areas follow:

1. Diagnosis and Identification of the Relevant Attributes of the Child and his Environment.

Competent Teachers combine in a multitude of ways, three factors of importance in order to identify the status of the child's current

functional levels and to identify how the environment influences his functioning. The three factors are: (a) resources in the environment that can provide information; (b) characteristics that are of relevance to the work of the teacher; (c) methods for collecting information about the child and his environment. After a comprehensive assessment has been completed, the teacher can specify instructional and short term objectives for the child.

2. Specification of Objectives.

Following the diagnosis and identification of the relevant attributes of the child and his environment, one or more needs of the child must be evident if the teacher is to provide further services. The teacher must translate such needs into clear unequivocal statements of objectives so that the tasks to follow can be efficiently and successfully completed. "You cannot concern yourself with the problem of selecting the most efficient route to your destination until you know what your destination is." (Mager, 1962, p. 1)

3. Task Analysis.

Once the destination (i.e., terminal behavior) is known, the teacher analyzes the behavior, listing sequentially the enroute behavior required to master the terminal behavior. After identifying the enroute behavior as yet unmastered by the child, the teacher performs the next tasks in the Diagnostic Teaching Model, i.e., selection and use of instructional strategies and materials.

4. Selection and Use of Instructional Strategies and Materials.

Given previous assessment of the relevant attributes of the child and his environment, instructional and short term objectives, and unmastered enroute behavior, the teacher selects the instructional strategy and materials that match the identified attributes, objectives, and enroute behavior. The teacher then implements the instructional strategy and materials in accordance with the procedures specified during the selection process.

5. Evaluation of Pupil Progress.

As implementation of the instructional strategy and materials advances, the teacher collects and summarizes data regarding the child's behavior that is relevant to the objectives specified above. The teacher then interprets the data and decides whether or not minimally acceptable performance has been attained. Dependent on the outcome of the interpretation, (s)he either revises the instructional strategy and/or materials or moves on to the next objective(s) for the child.

6. Behavior Management.

Behavior management, when it becomes an identified need of the child, is conducted according to the steps of the Diagnostic Teaching Model. However, the teacher must demonstrate skill in conducting his/her day to day interaction with children without specifically stated objectives and instructional strategies. In doing so, (s)he shows competence in three ways: (a) stimulates desired interaction in children; (b) reinforces desired interaction in children; (c) responds appropriately to undesired interaction in children.

7. Utilization of Resources.

The use of resources, both in terms of receiving and providing services, is of paramount importance to teachers. The teacher must not only know what resources are available to help him/her perform, but must also request their services when necessary in an appropriate way. The teacher is also ready to respond to requests for services when they come. Within this structure (s)he must effectively communicate information (s)he has available and maintain propitious relations with resources.

8. Individualized Instruction.

The Diagnostic Teaching Model effectively outlines the tasks the teacher must perform in this task area.

9. Parent Counseling.

Any teacher involved with children will soon note that the primary task of imparting new skills to children can be more effective by constructively involving the parents of her charges. Most childhood development programs have clearly shown that parental involvement is necessary for optimal progress. Therefore, the teacher must show competence in applying the following steps of parent involvement process: (a) how the need for help develops and in what areas; (b) by whom the help can be given and at what time.

10. Professional Activities.

A professional teacher is actively involved in his/her professional organizations. (S)he may attempt to influence local, state, and national legislation in favor of special education goals, organize and attend conventions, conferences, and workshops to expand his/her knowledge, etc. Further, (s)he analyzes information from professional journals, seeks and implements methods for enhancing his/her profession, maintains his/her professional ethics, and communicates his/her ideas to others in the field by word of mouth and written expression.

11. Knowledge of Contemporary Trends.

The competent teacher is not only aware of, but also evaluates and attempts to predict important trends in the field. This includes new theoretical approaches, controversial issues, recently produced devices, instructional strategies, materials, etc.

12. Teaching in Content Areas.

The realm of influence of any teacher may cover content areas ranging from art to chemistry. However, mathematics, reading, writing, and spelling are considered to be the basic knowledge areas for the teacher. Additionally, (s)he must be very familiar with both normal child development and frequently observed discrepancies from normality in the areas of motor and socioemotional development.

EVALUATION FORM
Teacher Competency Journal

Teacher: _____ Supervisor: _____
 Site: _____ Cooperating Teacher: _____
 Term: _____

.

Evaluation Summary

Number of Nonzero Ratings _____
 Sum of Ratings/Number of Nonzero Ratings _____
 Grand Mean (Zero Ratings Excluded) _____
 Means for Task Areas (/ # of ratings)

- Identification of Relevant Attributes (Task Area I) _____
- Selection of Instructional Objectives and Evaluative Components (Task Area II) _____
- Task Analysis and Selection of Evaluative Components (Task Area III) _____
- Selection and Use of Instructional Strategies and Materials (Task Area IV) _____
- Implementation of Evaluation (Task Area V) _____
- Behavior Management (Task Area VI) _____
- Working with Resources (Task Area VII) _____
- Working with Parents (Task Area X) _____
- Knowledge of Content Areas (Task Area XII) _____

Comments:

INSTRUCTIONS FOR ASSIGNMENT OF SCALE VALUES

Indicate the degree to which the teacher has achieved each objective by circling the appropriate number. The numbers represent the following values:

- 4 - The teacher demonstrated this objective with a high degree of excellence; there is little doubt that (s)he has mastered this objective.
- 3 - The teacher demonstrated this objective with minimal competence. With additional experience in student teaching or internship, it is probable that a high degree of excellence can be achieved. The recommendation is continued practice on the performance level; knowledge competencies have been mastered.
- 2 - The teacher did not demonstrate this objective with minimal competence. The recommendation is that (s)he master a few specified underlying knowledge competencies and then attempt this performance objective again.
- 1 - The teacher did not demonstrate this objective with minimal competence. The recommendation is that (s)he master the majority of the underlying knowledge competencies and then practice on the performance level.
- 0 - No basis for judgment on this objective.

NOTE: Use comments to explain why you assigned specific values.

EVALUATION: FORM
Teacher Competency Journal

Teacher: _____ Supervisor: _____
 Site: _____ Cooperating Teacher: _____
 Term: _____

<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.1.1.	Given a question (e.g., "Does the child have difficulty interacting with others?"), select the resource person(s) who can best answer the question through informal consultation.	0 1 2 3 4	X1	_____
1.1.2.	Given a question (e.g., "What information about the developmental history of the child is available?"), select a structured interview or interview technique that can best answer the question.	0 1 2 3 4	X1	_____
1.1.4.	Given a question (e.g., "How does the child compare with his age peers on the attribute, mathematical skills?"), construct a comprehensive list of standardized tests to consider, evaluate each, and select the test(s) that can best answer the question.	0 1 2 3 4	X1	_____
1.1.5.	Given an incomplete file containing assessment data for the child, analyze the data and determine whether or not the services of another professional are to be requested.	0 1 2 3 4	X1	_____
1.1.6.	Given a question (e.g., "How does the child compare with his age peers on the attribute, motor development?"), construct a comprehensive list of screening devices to consider, evaluate each, and select the screening device(s) that can best answer the question.	0 1 2 3 4	X1	_____

<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.1.7.	Given a question (e.g., "How well has the child mastered first grade arithmetic skills?"), collect a comprehensive set of nonstandardized tests, evaluate each test, and select the test(s) that can best answer the question.	0 1 2 3 4	X1	_____
1.1.8.	Given a set of conditions and a question (e.g., "How frequently does the child exhibit 'hyper-active behavior' and how does this frequency compare with other individuals in the class?", collect a comprehensive set of observation schedules, evaluate each schedule, and select the schedule(s) that can best answer the question.	0 1 2 3 4	X1	_____
1.1.0.	GIVEN SEVERAL QUESTIONS ABOUT AN ACTUAL SITUATION (e.g., "That specific antecedent and consequent events tend to increase the frequency of the child's social responses?"), SELECT THE ASSESSMENT METHODS THAT CAN BEST ANSWER THE QUESTIONS.	0 1 2 3 4	X1	_____
1.2.2.	Given a question (e.g., "What environmental conditions may be present in the home that negatively or positively influence the child's performance in school?"), construct a structured interview that can answer the question.	0 1 2 3 4	X1	_____
1.2.5.	Given an incomplete file containing assessment data for a child and an analysis of the data that determined what information is needed to complete the file, decide which professional(s) can help collect the data and write an appropriate request for services.	0 1 2 3 4	X1	_____
1.2.6.	Given a question (e.g., "How does the child's peer interaction at home compare with his peer interaction at school?"), construct a screening device that can answer the question.	0 1 2 3 4	X1	_____

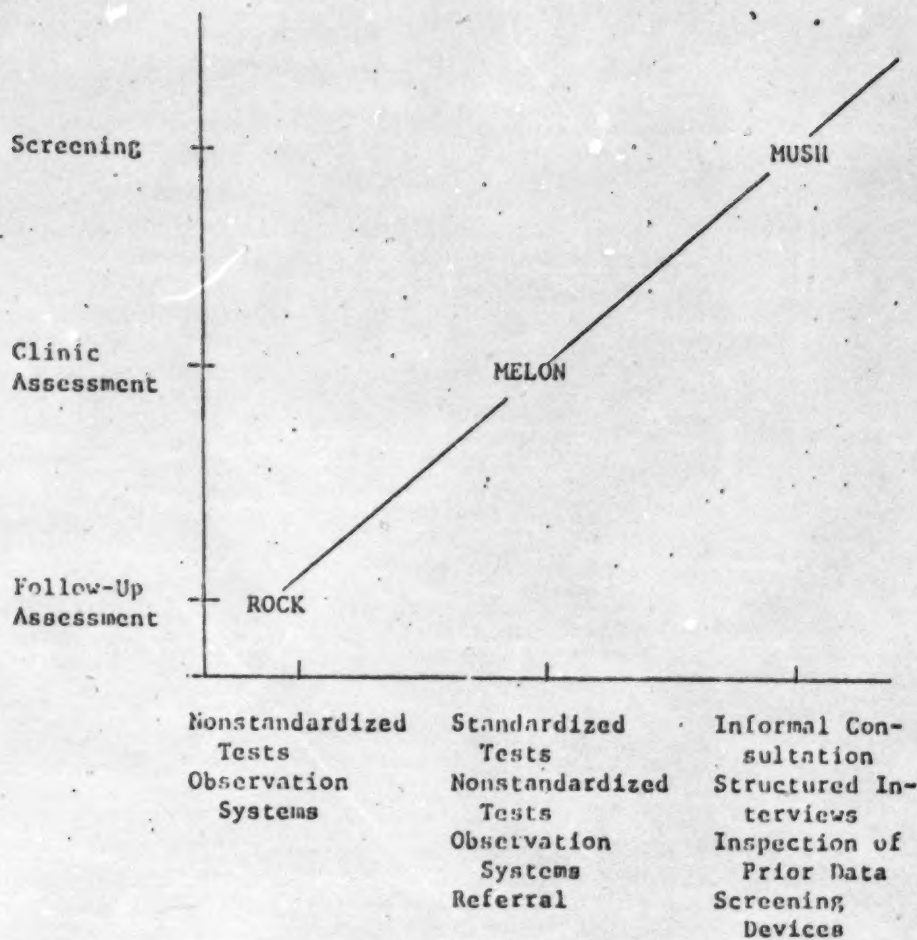
<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.2.7.	Given a question (e.g., "What is the child's rate of correct responding to the presentation of sight words (taken from the child's grade level)?"), construct a non-standardized test that can answer the question.	0 1 2 3 4	X1	_____
1.2.8.	Given a question (e.g., "How frequently do children in a specified class raise their hands to request permission before vocalizing?"), construct an observations schedule that can answer the question.	0 1 2 3 4	X1	_____
1.2.0.	GIVEN SEVERAL QUESTIONS ABOUT AN ACTUAL SITUATION (e.g., "What level of proficiency does the child demonstrate in the area of word attack skills?"), CONSTRUCT ASSESSMENT METHODS THAT CAN ANSWER THE QUESTIONS.	0 1 2 3 4	X1	_____
1.3.2.	Given a structured interview and one or more resource people, conduct the interview according to its related instructions and incorporate a means for recording the data.	0 1 2 3 4	X1	_____
1.3.3.	Given a file containing previously collected data for a child (e.g., school records), inspect the data, select the data that is relevant to the assessment question, and incorporate an appropriate means for recording the data.	0 1 2 3 4	X1	_____
1.3.4.	Given a standardized test (e.g., Gates-McKillop Reading Diagnostic Tests), administer the test according to the instructions in the administrative manual.	0 1 2 3 4	X1	_____
1.3.5.	Following the date on which services were received, schedule a meeting with the resource person(s) who collected the data. In the meeting collect the resource person's written summary of the data obtained and discuss the implications of the results.	0 1 2 3 4	X1	_____

<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.3.6.	Given a screening device (e.g., Mooney Problem Checklist, Behavior Problem Checklist), ensure that the screening device is correctly completed by the appropriate resource person (e.g., self, parent, child).	0 1 2 3 4	X1	_____
1.3.7.	Given a nonstandardized test, administer the test according to the instructions suggested by the test producer and according to general administration practices usually advocated.	0 1 2 3 4	X1	_____
1.3.8.	Given an observation schedule (e.g., Teacher Behavior Code, Child Behavior Code), employ the instrument according to the instructions suggested by the producer of the observation schedule.	0 1 2 3 4	X1	_____
1.3.0.	GIVEN THE METHODS OF ASSESSMENT (e.g., systematic observation), COLLECT THE ASSESSMENT DATA ACCORDING TO THE PROCEDURES OF THE SPECIFIC METHODS AND INCORPORATE APPROPRIATE MEANS TO RECORD THE DATA.	0 1 2 3 4	X2	_____
1.4.1.	Given the responses of resource person(s) collected during the informal consultation, briefly (anecdotally) summarize the information collected and its implications.	0 1 2 3 4	X1	_____
1.4.2.	Given the responses of resource person(s) (e.g., videotape, cassette tape, dictated), summarize the responses in a relevant and meaningful way in order to help answer the assessment question.	0 1 2 3 4	X1	_____
1.4.4.	Given a completed protocol for a standardized test (e.g., Stanford Achievement Test), score the test, derive age (grade) equivalents for the overall test and for each subtest (as appropriate), and discuss the implications of the results with regard to the assessment question.	0 1 2 3 4	X1	_____

<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.4.6.	Given a completed screening device, summarize the responses by means appropriate to the device. For instance, score the screening device, derive age (grade) equivalents for the overall screening device and for each subarea (as appropriate), and discuss the implications of the results with regard to the assessment question or score the screening device, compute the percentage of the total possible score for the overall device and for each subarea (as appropriate), and discuss the implications of the results with regard to the assessment question.	0 1 2 3 4	X1	_____
1.4.7.	Given a completed nonstandardized test, summarize the responses by means appropriate to the test and to the question asked. For instance, count the number of correct responses to test items and divide the number correct by the total amount of time required to complete the test to derive a behavior rate or count the number of correct responses to test items and compute the percentage correct or measure the total amount of time that was required to complete the test. Discuss the implications of the results with regard to the assessment question.	0 1 2 3 4	X1	_____

<u>Number</u>	<u>Performance Objective</u>	<u>Rating</u>	<u>Weight</u>	<u>Total</u>
1.4.8.	Given an observation schedule and a set of completed tally sheets, summarize the data by means appropriate to the observation schedule and to the question asked. For instance, compute the mean duration of the behavior or compute the rate of the behavior or compute the mean latency of the observed response or compute the mean intensity of the behavior. Discuss the implications of the results.	0 1 2 3 4	X1	_____
1.4.0.	GIVEN RAW ASSESSMENT DATA (e.g., individual responses to questionnaire items), SUMMARIZE THE DATA IN A RELEVANT AND MEANINGFUL WAY IN ORDER TO HELP ANSWER ASSESSMENT QUESTIONS. INTERPRET THE SUMMARY AND DISCUSS ITS IMPLICATIONS WITH REGARD TO THE ASSESSMENT QUESTION.	0 1 2 3 4	X2	_____
1.5.0.	GIVEN SUMMARIES OF THE ASSESSMENT DATA DERIVED FROM A VARIETY OF METHODS AND RESOURCES AND COVERING A VARIETY OF ATTRIBUTES, DETERMINE THE ATTRIBUTES MOST IN NEED OF IMPROVEMENT AND STATE ESTIMATES OF THE CHILD'S STATUS REGARDING BROAD SKILLS FOR EACH ATTRIBUTE.	0 1 2 3 4	X2	_____
1.6.0.	GIVEN AN ACTUAL SITUATION (e.g., child or small group of children, setting, variety of available resources and assessment methods), AND SEVERAL QUESTIONS ABOUT THAT SITUATION (e.g., "How does the child compare to other children his age with regard to reading skills?"), SELECT OR CONSTRUCT ASSESSMENT METHODS, COLLECT ASSESSMENT DATA, SUMMARIZE THE ASSESSMENT DATA, AND INTERPRET THE DATA TO DETERMINE THE NEEDS OF THE CHILD AND HIS ENVIRONMENT.	0 1 2 3 4	X4	_____

Phases of Assessment

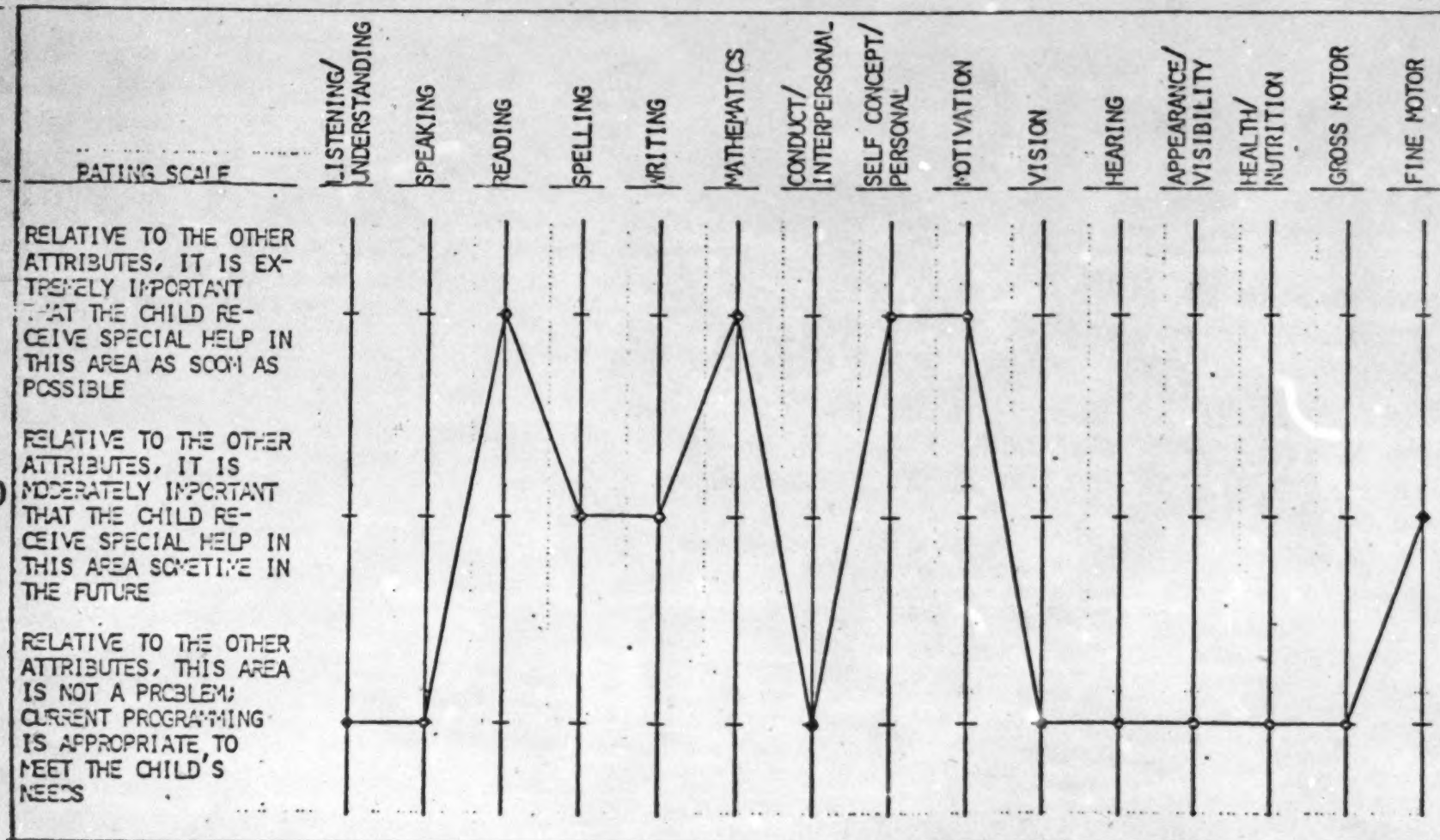


Examples of Assessment Methods

SCREENING

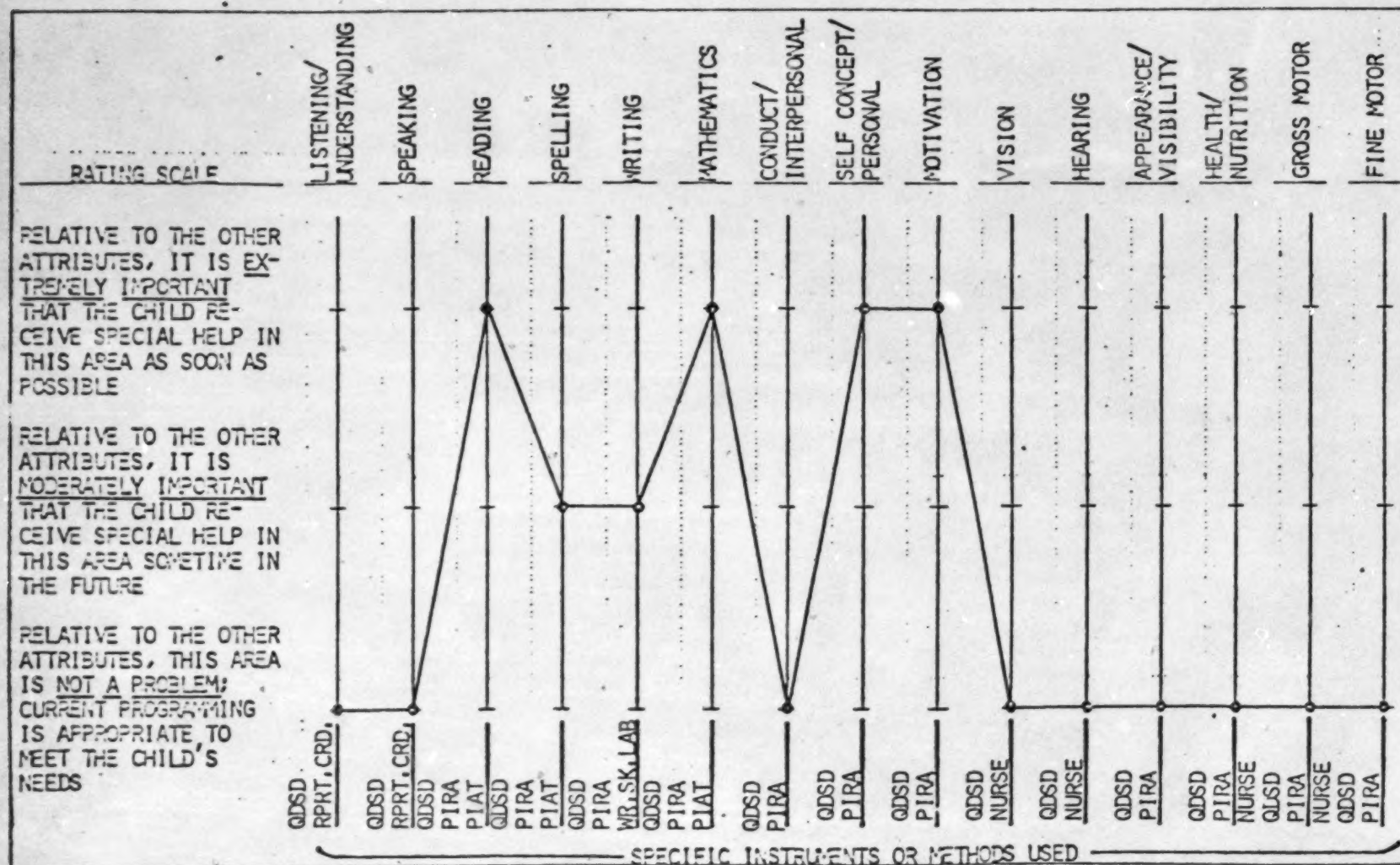
RCE 2/13/76

PROFILE FOR THE QUICK AND DIRTY SCREENING DEVICE (QDSD)



SCREENING OVERALL SUMMARY PROFILE

RCE2/18/76



I. Task Area: Identification of the Relevant Attributes of the Child and his Environment

1. Competency: Select the Use of Standardized Test as an Assessment Method

- 1.1.4. Evaluative Objective:** Given a question (e.g., "How does the child compare with his age peers on the attribute, 'mathematic skills'?"), construct a comprehensive list of tests to consider, evaluate each, and select the test(s) that can best answer the question.

***List the tests that were considered.**

- a. STANFORD ACHIEVEMENT TEST
- b. PEABODY INDIVIDUAL ACHIEVEMENT TEST
- c. WIDE RANGE ACHIEVEMENT TEST
- d. _____
- e. _____

***List the resources used as aids in the evaluation of the tests.**

- a. COURSE NOTES FROM "EDUCATIONAL TESTING" (EEC 454)
HELEN DOLBY (CLASSROOM TEACHER)
- b. RACHEL SMITH (STUDENT TEACHER)
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____

Note: This includes people, textbooks, and other references as resources.

***Name the test that you selected.**

PIAT

1. Task Area: Identification of the Relevant Attributes of the Child and his Environment

3. Competency: Collect Assessment Data by Administering a Standardized Test

- 1.3.4. Evaluative Objective:** Given a standardized test (e.g., Gates-McKillop Reading Diagnostic Test), administer the test according to the instructions in the administrative manual.

Note: Before administering a standardized test for which you have not previously demonstrated skill, ask a competent examiner to observe your administration of the test.

4. Competency: Summarize Responses to Standardized Test

- 1.4.4. Evaluative Objective:** Given a completed protocol for a standardized test (e.g., Stanford Achievement Test), score the test, derive age (grade) equivalents for the overall test and for each subtest (as appropriate), and discuss the implications of the results with regard to the assessment question.

*Attach the completed protocol following this page.

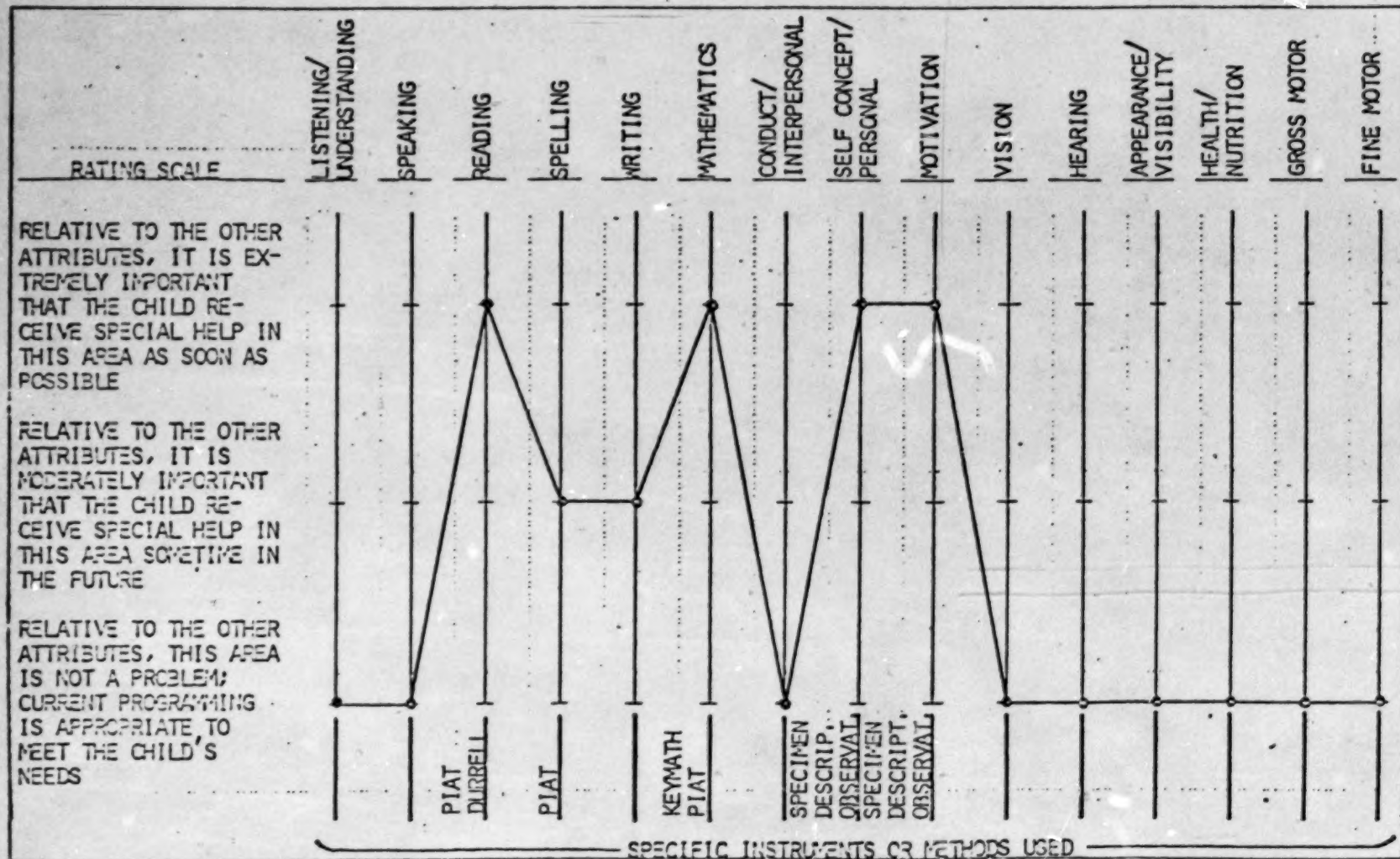
*Discuss the implications of the results with regard to the assessment question below.

BECAUSE BILLY HAD BEEN GIVEN THE PIAT LAST SUMMER, I DECIDED TO ADMINISTER IT AGAIN FOR COMPARATIVE PURPOSES. IT SOON BECAME EVIDENT THAT BILLY WAS QUALIFIED TO ADMINISTER THE TEST TO ME. HE KNEW HOW TO RECORD ANSWERS AND WHERE TO LOCATE SUBTESTS, DIRECTIONS, AND ANSWERS. WHEN WE REACHED THE READING COMPREHENSION SECTION, BILLY WAS ABLE TO CHOOSE THE CORRECT PICTURE THAT DESCRIBED THE SENTENCE WITHOUT HARDLY READING IT. WHEN I ASKED BILLY TO READ THE SENTENCE ALOUD, HE ANSWERED, "OH, SOME OF THOSE WORDS ARE TOO HARD FOR ME. I JUST READ THE SHORT ONES AND THEN LOOK AT THE PICTURES. I'VE HAD THIS TEST BEFORE, REMEMBER?" AFTER BILLY DEMONSTRATED HIS GUESSING ABILITY SEVERAL TIMES IT BECAME EVIDENT THAT FAMILIARITY WITH THE TEST FORMAT WAS NOT PARTICULARLY ADVANTAGEOUS FOR HIM. IN FACT, HIS LACK OF CONCENTRATION ON TEST ITEMS MAY HAVE CONTRIBUTED TO THE RELATIVELY LOW GRADE EQUIVALENTS OBTAINED.

CLINIC ASSESSMENT

OVERALL CLINIC ASSESSMENT PROFILE

31



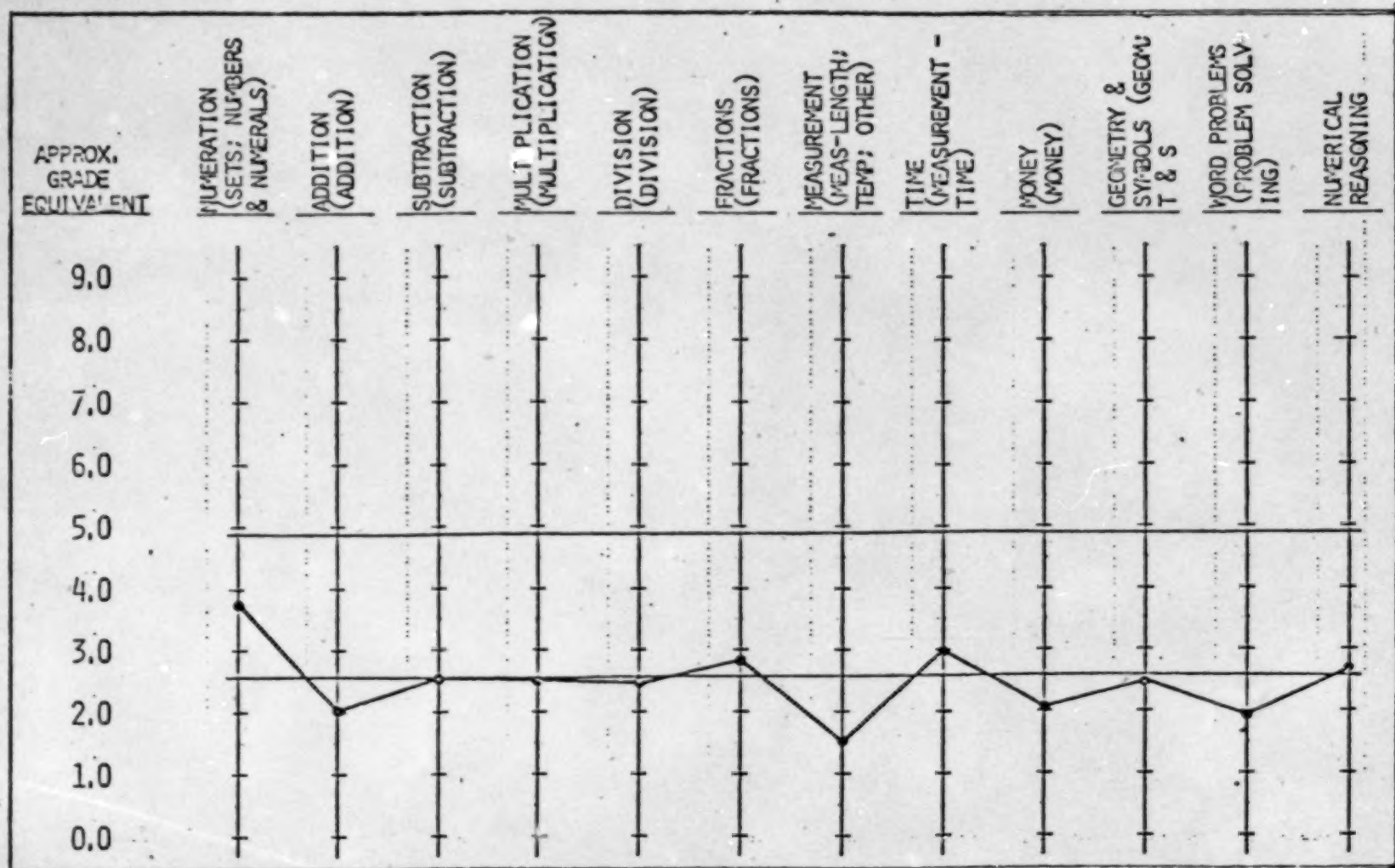
37

CLINIC ASSESSMENT

RCE 2/18/76

PROFILE - KEYMATH DIAGNOSTIC ARITHMETIC TEST

BILLY POGBAH

ACTUAL
GRADE
PLACEGRADE
EQUIV.

39

N.B.: TAXONOMY OF MATHEMATICS OBJECTIVES IN PARENTHESES

ATTRIBUTE: MATHEMATICS

BROAD SKILL ENABLING SKILL	PROFICIENCY LEVELS AND DATE ACHIEVED PERCENT CORRECT (%) IN RED - RATE CORRECT (MM) IN BLUE									
	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100
SETS AND SET THEORY										9-29-75
NUMBERS AND NUMERALS										9-29-75
ADDITION						9-30-75				
ADDITION FACTS - ADDENDS 0-5			9-30-75							
ADDITION FACTS - ADDENDS 6-9		10-1-75								
ADDITION FACTS - ADDENDS 0-9		10-1-75								
FORMAL OPERATIONS 2-DIGIT, 2-ROW, NO REGROUPING						10-2-75				
FORMAL OPERATIONS 3-DIGIT, 3-ROW, NO REGROUPING					10-2-75					
FORMAL OPERATIONS 2-DIGIT, 2-ROW, REGROUPING				10-3-75						
FORMAL OPERATIONS 3-DIGIT, 3-ROW, REGROUPING			10-3-75							

COMPETENCY:

J

DESCRIBE THE GENERAL CONDITIONS OF LEARNING FOR THE INSTRUCTIONAL STRATEGY

4.1.2. *Evaluative Objective:* Given the development of an instructional strategy based upon the short term objective(s) and the characteristics of the child, describe how the instructional strategy meets the general conditions of learning.

*DESCRIBE how the instructional strategy meets the following general conditions of learning. Itemize responses by their identification letter and number.

1. Acquisition

- (a) incidental and intentional learning
 - (1) modeling
 - (2) prompting
- (b) whole and parts learning
- (c) distribution of practice (massed vs. spaced training)
- (d) amount of material
- (e) recitation
- (f) amount of practice
- (g) oral and visual presentation
- (h) response differentiation
- (i) orientation and attention
- (j) discovery and expository methods
- (k) structure
- (l) knowledge of results (feedback)
- (m) shaping
- (n) chaining
- (o) stimulus fading

2. Retention

- (a) type of retention measure
- (b) instructions and intent
- (c) degree of original learning
- (d) reminiscence
- (e) conditions influencing proactive and retroactive inhibition

3. Generalization

- (a) instructions and intent
- (b) degree of original learning
- (c) similarity relationships

COMPETENCY:

J

DESCRIBE SPECIFIC CONDITIONS OF LEARNING FOR THE INSTRUCTIONAL STRATEGY

4.1.3. *Evaluative Objective:* Given the development of an instructional strategy based upon the short term objective(s) and the characteristics of the child, describe how the instructional strategy meets the specific conditions of learning it involves.

*DESCRIBE how the instructional strategy meets the following specific conditions of learning. Itcize responses by their identification number and letter.

1. Verbal Learning
 - (a) meaningfulness
 - (b) intratask similarity
 - (c) serial position affect
 - (d) organization devices
 - (e) prompting, confirmation, and study-test
2. Concept Learning
 - (a) nature of rules
 - (b) relevant and irrelevant dimensions
 - (c) redundancy
 - (d) taxonomic level
 - (e) contiguity of instances
 - (f) positive and negative instances
 - (g) simultaneous and successive exposures
 - (h) expository and discovery methods
3. Motor Learning
 - (a) reaction time
 - (1) intensity of response signals
 - (2) number of stimuli
 - (b) training programs
4. Discrimination Learning
 - (a) distinctive features
 - (b) irrelevant features
 - (c) redundancy
 - (d) contiguity
 - (e) sequence
 - (f) dimensionality of stimuli
5. Problem Solving
 - (a) task size
 - (b) number of steps to solution
 - (c) negative transfer
 - (d) training for problem solving
6. Connected Discourse
 - (a) sentence processing
 - (b) words with connected discourse
 - (c) ...
 - (d) ...

COMPETENCY:

J

DESCRIBE THE MOTIVATIONAL CONDITIONS FOR THE INSTRUCTIONAL STRATEGY

4.1.4. *Evaluative Objective:* Given the development of an instructional strategy based upon the short term objective(s) and the characteristics of the child, describe how the instructional strategy meets the motivational conditions for performance.

*DESCRIBE how the instructional strategy meets the following motivational conditions for performance. Itemize responses by their identification number and letter.

1. Acceleration of Existing Behavior
 - (a) positive reinforcement
 - (b) negative reinforcement
 - (c) removal of interfering conditions
2. Maintenance of Existing Behavior
 - (a) schedules of reinforcement
 - (1) continuous
 - (2) intermittent
 - ratio
 - fixed
 - variable
 - interval
 - fixed
 - variable
 - (b) limited hold
 - (c) differential reinforcement of high rates (DRH)
 - (d) differential reinforcement of low rates (DRL)
3. Deceleration of Existing Behavior
 - (a) extinction
 - (b) response cost
 - (c) time out
 - (d) punishment
 - (e) differential reinforcement for stimulus control
 - (f) stimulus change
 - (g) satiation (negative practice, beta method)
 - (h) differential reinforcement of other behavior (DRO)
 - (i) reinforcement of incompatible behavior

Figure 1. Flowchart for the Diagnostic Teaching Model

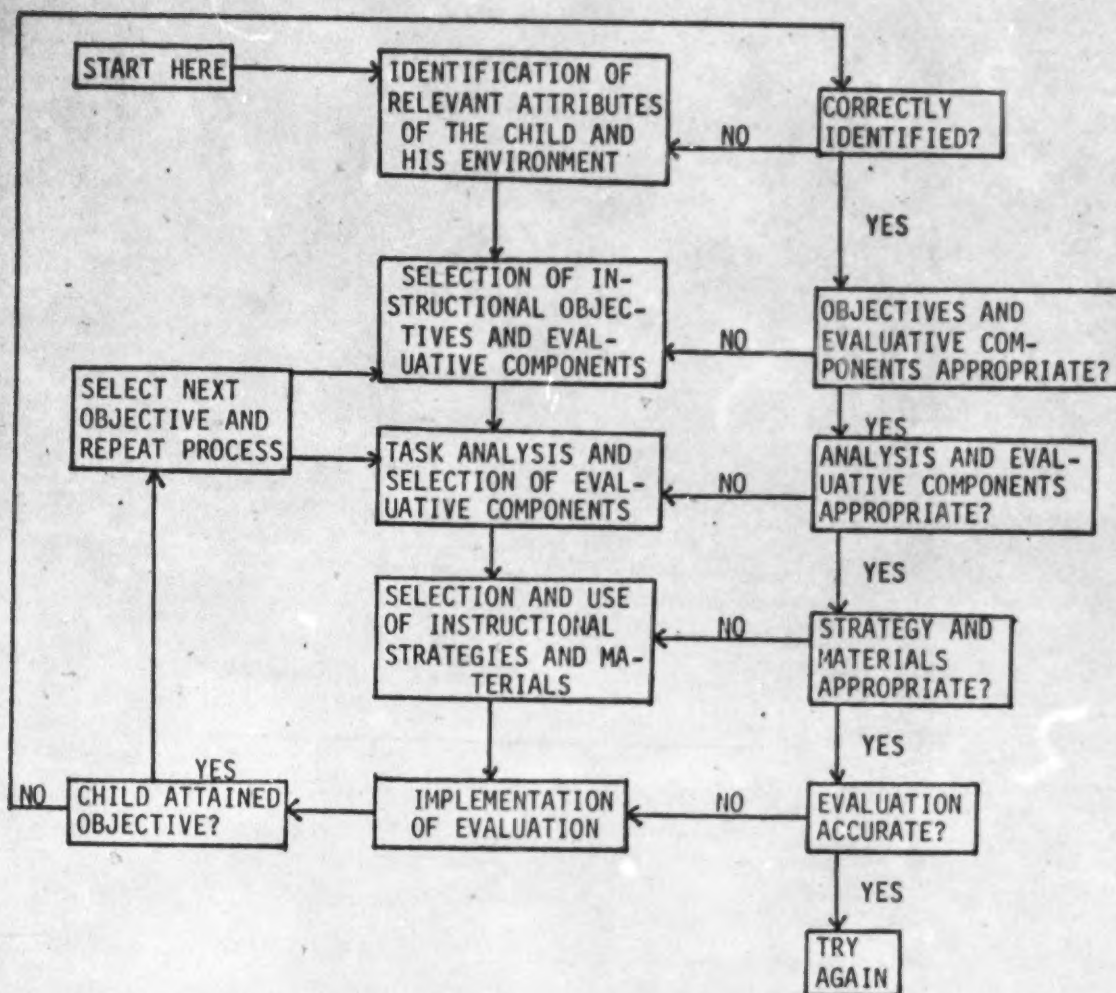
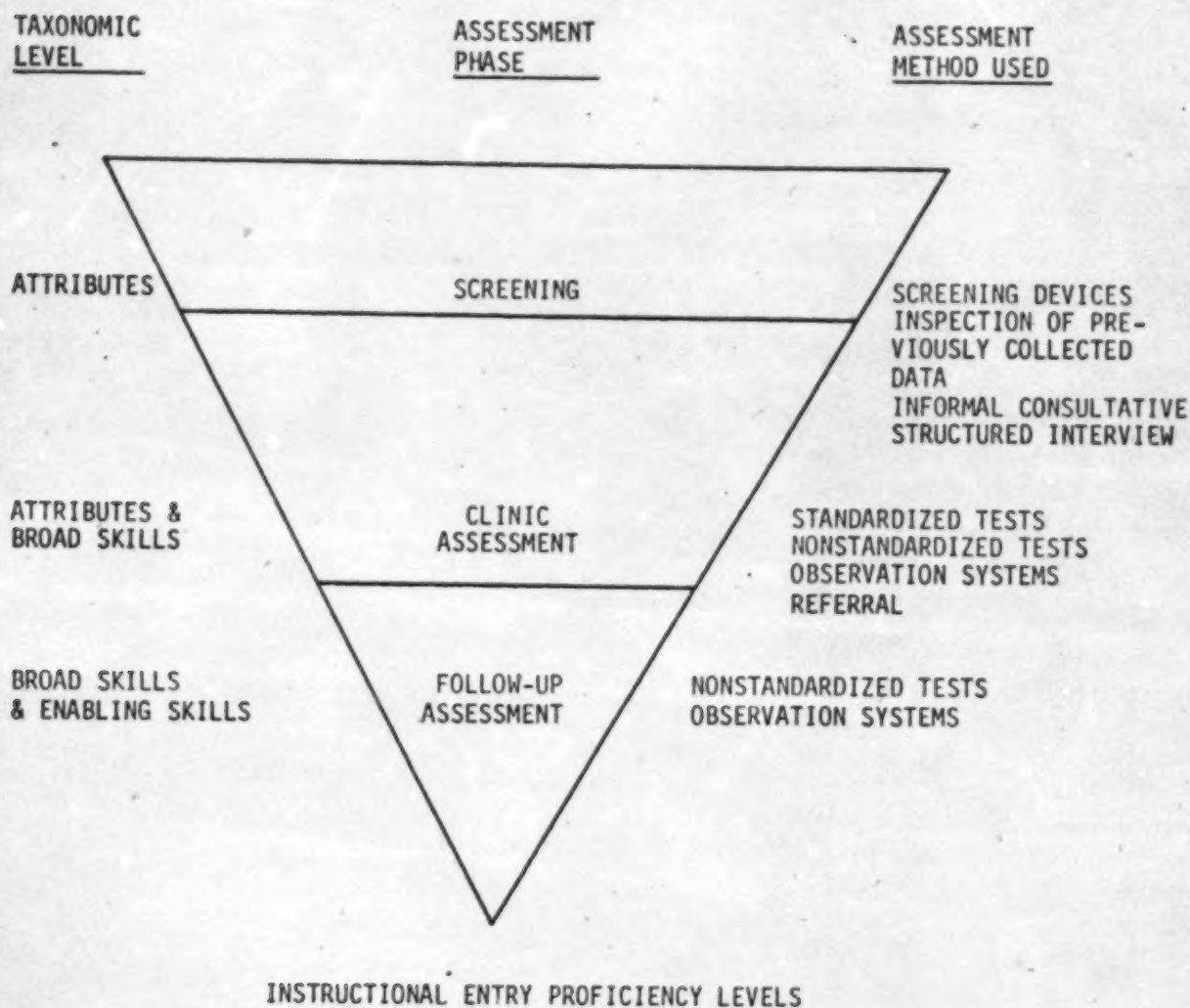


Figure 2. Relationships Among Assessment Variables



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